

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P237873

Luminaire Tested: **8VRVT2-LD5-22-FR50-UNV-L840-CD2-WL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P237873  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-13)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8VRVT2-LD5-22-FR50-UNV-L840-CD2-WL-U  
Description: METALUX VRVT2 LED LUMINAIRE  
FROSTED LENS/15% DR HIGH IMPACT ADDITIVE STANDARD DISTRIBUTION  
8FT FIXTURE  
Light Source: (448) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21240.0 lumens  
Efficiency: N/A  
Efficacy: 128.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 8.33' x H: 0.17')  
CIE Type: Direct

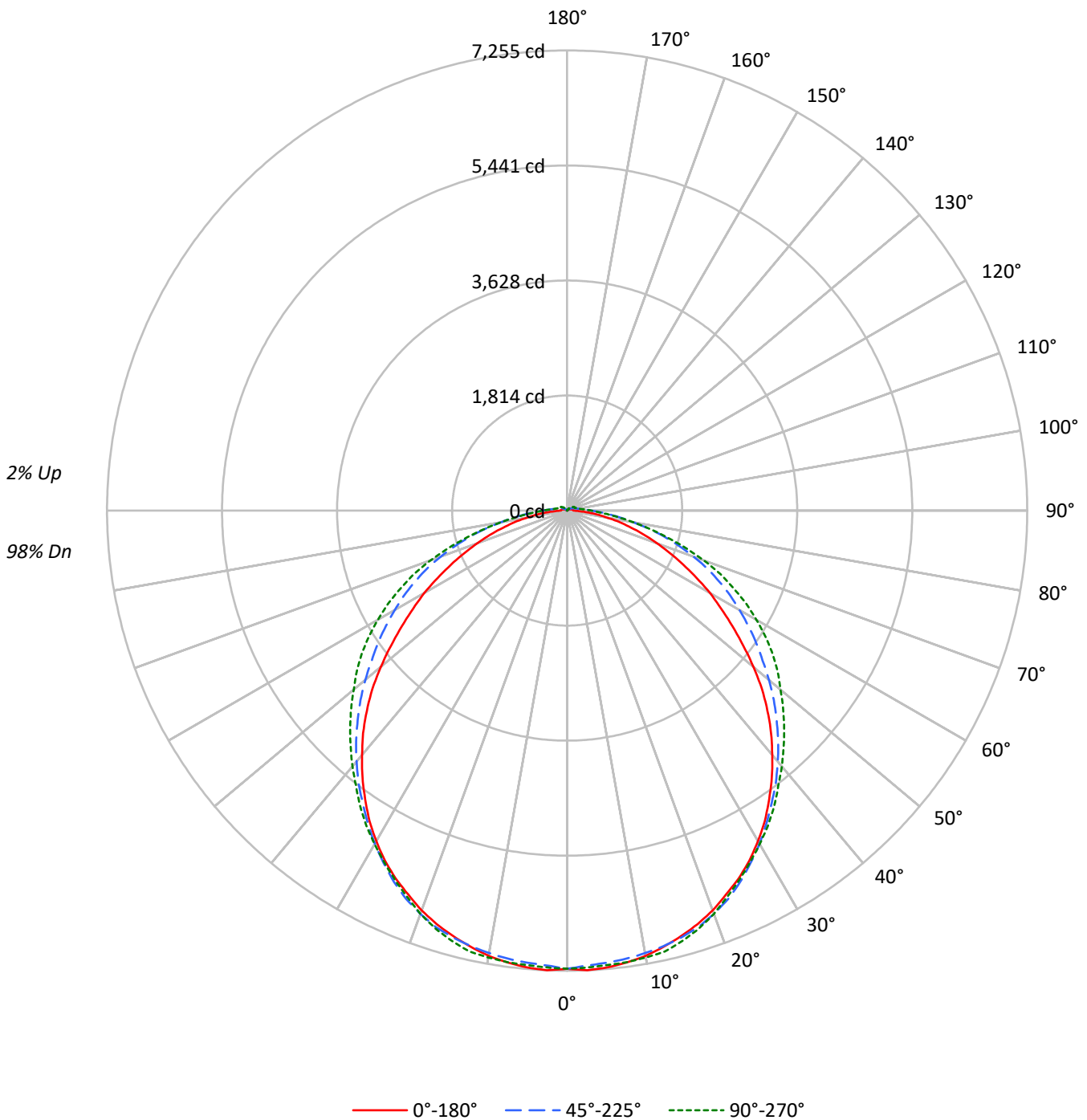
Input Watts (W): 164.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	118	118	118	118	115	115	115	115	110	110	110	105	105	105	100	100	100	98					98			
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	81					81			
2	98	89	82	76	95	87	81	75	83	78	73	80	75	71	76	72	69	67					67			
3	89	78	70	63	86	76	69	63	73	67	61	70	64	60	67	62	58	56					56			
4	81	69	60	54	79	68	60	53	65	58	52	62	56	51	60	55	50	48					48			
5	75	62	53	46	73	61	52	46	58	51	45	56	49	44	54	48	44	41					41			
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	49	43	38	36					36			
7	64	51	42	36	62	50	41	35	48	40	35	46	39	34	45	39	34	32					32			
8	60	46	38	32	58	45	37	32	44	36	31	42	36	31	41	35	30	29					29			
9	56	42	34	29	54	42	34	28	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23					23			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	18660	18660	18660
5°	18719	18158	18128
10°	18636	17801	17728
15°	18478	17464	17247
20°	18309	17050	16588
25°	18073	16492	15846
30°	17747	15812	15185
35°	17270	15094	14552
40°	16682	14402	13875
45°	16003	13648	13259
50°	15055	12857	12633
55°	13932	12080	12077
60°	12990	11323	11286
65°	11845	10530	10297
70°	10781	9484	9019
75°	9712	8170	7256
80°	8627	6501	5436
85°	7694	5004	3866



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	684.6	3.2
10°-20°	1970.4	9.3
20°-30°	2968.2	14.0
30°-40°	3534.8	16.6
40°-50°	3608.6	17.0
50°-60°	3233.9	15.2
60°-70°	2523.8	11.9
70°-80°	1553.7	7.3
80°-90°	647.8	3.0
90°-100°	233.3	1.1
100°-110°	125.7	0.6
110°-120°	82.2	0.4
120°-130°	46.7	0.2
130°-140°	20.7	0.1
140°-150°	5.0	0.0
150°-160°	0.5	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	5623.2	26.5
0°-40°	9158.0	43.1
0°-60°	16000.5	75.3
0°-90°	20725.8	97.6
90°-120°	441.2	2.1
90°-150°	513.7	2.4
90°-180°	514.0	2.4
0°-180°	21240.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7223	7223	7223	7223	7223	
5°	7231	7205	7155	7205	7195	687
15°	6946	6949	6967	7046	7025	1960
25°	6400	6452	6460	6450	6423	2946
35°	5553	5670	5623	5686	5691	3471
45°	4468	4583	4669	4802	4839	3439
55°	3182	3367	3639	3882	3958	2855
65°	2021	2233	2646	2863	2889	2011
75°	1046	1276	1582	1660	1631	1121
85°	319	497	651	651	627	328
90°	105	264	384	390	379	67
95°	94	149	240	251	243	76
105°	73	73	133	149	146	77
115°	39	37	92	120	126	39
125°	18	10	52	86	94	16
135°	8	5	21	47	55	6
145°	3	3	3	13	18	2
155°	3	3	3	0	0	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7223.3	7223.3	7223.3	7223.3	7223.3
2.5°	7254.7	7228.5	7178.9	7225.9	7210.2
5°	7231.2	7205.0	7155.3	7205.0	7194.6
7.5°	7186.7	7168.4	7126.6	7186.7	7181.5
10°	7129.2	7110.9	7084.8	7158.0	7155.3
12.5°	7042.9	7035.1	7032.5	7124.0	7118.7
15°	6946.2	6948.8	6967.1	7045.5	7024.6
17.5°	6836.4	6852.1	6883.5	6930.5	6909.6
20°	6708.3	6734.4	6765.8	6784.1	6765.8
22.5°	6551.4	6598.5	6629.9	6616.8	6593.3
25°	6399.8	6452.1	6459.9	6449.5	6423.3
27.5°	6222.0	6287.4	6263.9	6276.9	6248.2
30°	6018.1	6109.6	6065.2	6088.7	6070.4
32.5°	5801.1	5908.3	5848.2	5887.4	5892.6
35°	5552.8	5670.4	5623.4	5686.1	5691.3
37.5°	5301.8	5424.7	5403.8	5482.2	5469.1
40°	5029.9	5165.9	5165.9	5252.1	5265.2
42.5°	4760.6	4875.7	4925.3	5027.3	5053.4
45°	4467.8	4582.9	4669.1	4802.5	4839.1
47.5°	4167.2	4295.3	4418.2	4564.6	4619.5
50°	3835.2	3989.4	4151.5	4342.4	4392.0
52.5°	3500.5	3673.1	3884.8	4114.9	4185.5
55°	3181.6	3367.2	3639.1	3882.2	3958.0
57.5°	2878.3	3069.2	3388.1	3644.3	3709.7
60°	2601.2	2765.9	3139.8	3406.4	3445.6
62.5°	2303.2	2499.3	2896.6	3142.4	3186.8
65°	2020.9	2232.6	2645.7	2862.7	2888.8
67.5°	1754.2	1971.2	2392.1	2582.9	2614.3
70°	1505.8	1735.9	2117.6	2277.1	2287.5
72.5°	1278.4	1503.2	1845.7	1973.8	1955.5
75°	1045.7	1275.8	1581.7	1660.1	1631.3
77.5°	849.6	1058.8	1315.0	1372.5	1328.1
80°	645.7	847.0	1056.2	1077.1	1056.2
82.5°	473.2	661.4	841.8	847.0	815.7
85°	318.9	496.7	651.0	651.0	627.4
87.5°	180.4	363.4	496.7	501.9	475.8
90°	104.6	264.0	384.3	389.5	379.1
92.5°	96.7	190.8	300.6	308.5	298.0
95°	94.1	149.0	240.5	251.0	243.1
97.5°	91.5	120.3	201.3	209.1	203.9
100°	88.9	99.3	169.9	183.0	180.4
102.5°	81.0	86.3	149.0	162.1	159.5
105°	73.2	73.2	133.3	149.0	146.4
107.5°	65.4	62.7	120.3	141.2	138.6
110°	54.9	54.9	109.8	133.3	133.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	47.1	47.1	99.3	128.1	128.1
115°	39.2	36.6	91.5	120.3	125.5
117.5°	31.4	31.4	81.0	112.4	117.6
120°	26.1	23.5	70.6	104.6	112.4
122.5°	20.9	15.7	62.7	94.1	104.6
125°	18.3	10.5	52.3	86.3	94.1
127.5°	13.1	7.8	44.4	75.8	86.3
130°	10.5	7.8	36.6	65.4	75.8
132.5°	10.5	5.2	28.8	54.9	65.4
135°	7.8	5.2	20.9	47.1	54.9
137.5°	5.2	5.2	13.1	39.2	47.1
140°	5.2	5.2	7.8	28.8	36.6
142.5°	5.2	2.6	2.6	20.9	28.8
145°	2.6	2.6	2.6	13.1	18.3
147.5°	2.6	2.6	2.6	5.2	10.5
150°	2.6	2.6	2.6	0.0	2.6
152.5°	2.6	2.6	2.6	0.0	0.0
155°	2.6	2.6	2.6	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)